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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Toshihiro Morita

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EXAMINER

OLANIRAN, FATIMAT O

ART UNIT

PAPER NUMBER

2615

NOTIFICATION DATE

DELIVERY MODE

09/09/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/812,967	Applicant(s) MORITA ET AL.	
	Examiner FATIMAT O. OLANIRAN	Art Unit 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection necessitated by applicant's amendment.

Claim Objections

2. Claim 2 is objected to because of the following informalities:

Claim 2 states, "...presumed inter-track boundaries dividing presumed tracks whose presumed track playing times are longer than a shortest playing time among the playing times of the tracks and are shorter than a longest playing time among the playing times of the tracks..."

It appears that the "presumed inter-track boundaries" are dividing the "presumed tracks". Applicant's term "dividing" renders the claim unclear, as mathematical division may be inferred.

Examiner's interpretation is-- presumed inter-track boundaries *separating or in between or adjacent to* presumed tracks--

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3, 5-7 is rejected under 35 U.S.C. 102(e) as being anticipated by Gilbert et al (6560577).

Claim 1, Gilbert discloses an information processing apparatus for detecting inter-track boundaries, (abstract) comprising: eliminating means for generating noise-eliminated audio data by eliminating noise from audio data generated by digitally converting analog audio signals of a plurality of tracks (col. 3 line 61-67 and col. 4 line 1-20) whose inter-track boundaries are silent means for detecting presumed inter-track boundaries presumed to be the inter-track boundaries of said plurality of tracks: based on portions of said noise-eliminated audio data whose signal levels are lower than a predetermined level threshold value (col. 5 line 1-12, limitation, “predetermined threshold” is inherent to invention because silence is a threshold); and specifying means for specifying said inter-track boundaries from the detected presumed inter-track boundaries, based on inter-track boundaries specifying information including at least one of a number of tracks of said plurality of tracks and playing times of the tracks (col. 4 line 43-61).

Art Unit: 2615

Claim 3 analyzed with respect to claim 1, Gilbert discloses wherein said means for specifying presumes said presumed inter-track boundaries as said inter-track boundaries based on errors between presumed track playing times of presumed tracks and said playing times of the tracks time (col. 5 line 25-37), said inter-track boundaries specifying information including the playing times of the tracks (col. 4 line 49-50).

Claim 5, Gilbert discloses an information processing method for detecting inter-track boundaries (abstract), comprising: of generating noise-eliminated audio data by eliminating noise from audio data generated by digitally converting analog audio signals of a plurality of tracks whose inter-track boundaries are silent (col. 4 line 6-15 and col. 4 line 30-39) detecting presumed inter-track boundaries presumed to be the inter-track boundaries of said plurality of tracks based on portions of said noise-eliminated audio data whose signal levels are lower than a predetermined level threshold value (col. 5 line 1-12, limitation, "predetermined threshold" is inherent to invention because silence is a threshold); and of specifying said inter-track boundaries from the detected presumed inter-track boundaries, based on inter-track boundaries specifying information including at least one of a number of tracks of said plurality of tracks and playing times of the tracks (col. 4 line 42-56).

Art Unit: 2615

Claim 6, Gilbert discloses a computer-readable medium including computer executable instructions, wherein the instructions, when executed by a processor, cause the processor (col. 3 lines 13-20) to perform a method comprising: of generating noise-eliminated audio data by eliminating .noise from audio data generated by digitally converting analog audio signals of a plurality of tracks whose inter-track boundaries are silent portions (col. 4 line 6-15 and col. 4 line 30-39); of detecting presumed inter-track boundaries presumed to be the inter-track boundaries of said plurality of tracks based on portions of said noise-eliminated audio data whose signal levels are lower than a predetermined level threshold value (col. 5 line 1-12, limitation, "predetermined threshold" is inherent to invention because silence is a threshold); and specifying said inter-track boundaries from the detected presumed inter-track boundaries, based on inter-track boundaries specifying information detected including at least one of a number of tracks of said plurality of tracks and playing times of the tracks (col. 4 line 42-56).

Claim 7, Gilbert discloses an information processing apparatus for detecting inter-track boundaries (abstract), comprising: a generation unit configured to generate noise-eliminated audio data by eliminating noise from audio data generated by digitally converting analog audio signals of a plurality of tracks whose inter-track boundaries are silent (col. 4 line 6-15 and col. 4 line 30-39); a detection unit configured to detect presumed inter-track boundaries presumed to be the inter-track boundaries of said plurality of tracks, based on portions of said noise-eliminated audio data whose signal

Art Unit: 2615

levels are lower than a predetermined level threshold value (col. 5 line 1-12, limitation, “predetermined threshold” is inherent to invention because silence is a threshold); and a specifying unit configured to specify said inter-track boundaries from the detected presumed inter-track boundaries, based on inter-track boundaries specifying information including at least one of a number of tracks of said plurality of tracks and playing times of the tracks (col. 4 line 42-56).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbert et al (6560577).

Claim 2 analyzed with respect to claim 1, Gilbert discloses said means for specifying specifies as said inter-track boundaries said presumed inter-track boundaries separating presumed tracks (col. 4 line 30-39), said inter-track boundaries specifying information including the shortest playing time and the longest playing time (col 4 line 47-51).

Art Unit: 2615

Gilbert does not explicitly disclose presumed tracks whose presumed track playing times are longer than a shortest playing time among the playing times of the tracks and are shorter than a longest playing time among the playing times of the tracks.

However Gilbert discloses matching track lengths, (col. 5 line 27-31) and detecting a smaller than average track (col. 4 line 61-67).

Therefore it would be obvious to one of ordinary skill in the art at the time the invention was made that the audio method of Gilbert determines a track length error by noting smaller or larger than average track lengths.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbert et al (6560577) in view of Gilbert (6763274)

Claim 4 analyzed with respect to claim 1, Gilbert et al discloses wherein said means for specifying compares a number of presumed tracks with said number of tracks, and said means for detecting again tries to detect said presumed inter-track boundaries, based on the portions of said noise-eliminated audio data whose signal levels are lower than said predetermined level threshold value (col. 5 line 1-12), according to a result of the comparison by said means for specifying, when the number of presumed tracks is smaller than said number of tracks said inter-track boundaries specifying information including the number of tracks (col. 4 line 42-45);

Art Unit: 2615

Gilbert et al does not explicitly disclose based on the portions of said noise-eliminated audio data whose signal levels are lower than another level threshold value greater than said predetermined level threshold value.

Gilbert discloses two threshold levels for silence and background noise (col. 4 lines 33-46). Gilbert does not explicitly disclose one threshold value greater than another; however it would be obvious to one of ordinary skill in the art at the time of the invention that a noise threshold would be higher than a silence threshold. Therefore it would be obvious to one of ordinary skill in the art at the time the invention was made to modify the silence detecting software of Gilbert et al with the floating threshold of Gilbert in order to detect silence, music, noise and various audio states.

In addition, the limitation, "...based on the portions of said noise-eliminated audio data whose signal levels are lower than another level threshold value greater than said predetermined level threshold value.." states that the signal levels are lower than the predetermined level threshold because the other threshold is greater than the predetermined threshold. Therefore it would be obvious to one of ordinary skill in the art at the time the invention was made that the silence detecting software of Gilbert implicitly reads on this limitation.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FATIMAT O. OLANIRAN whose telephone number is (571)270-3437. The examiner can normally be reached on M-F 10:00-6 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2615

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

FO

/Vivian Chin/
Supervisory Patent Examiner, Art Unit 2615